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Respectfully submitted,

Martin D. Moynihan

Dated: March 31, 2006

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Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	US National Phase of PCT/IL 2004/000898
				Filing Date	Herewith
				First Named Inventor	Ehud GAZIT et al
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	1	of	4	Attorney Docket Number	31689

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. 1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	1	US-6,359,112	03-19-2002	Kapumiotu et al.	
	2	US-3,791,932	02-12-1974	Schuurs et al.	
	3	US-3,853,987	12-10-1974	Dreyer	
	4	US-4,873,316	10-10-1989	Meade et al.	
	5	US-4,666,828	05-19-1987	Gusella	
	6	US-4,683,202	07-28-1987	Mullis	
	7	US-4,801,531	01-31-1989	Frossard	
	8	US-5,192,659	09-9-1993	Simons	
	9	US-5,272,057	12-21-1993	Smulson et al.	
	10	US-3,839,153	01-1-1974	Schuurs et al.	
	11	US-3,850,752	11-26-1974	Schuurs et al.	
	12	US-3,850,578	11-26-1974	McConnell	
	13	US-3,867,517	02-18-1975	Ling	
	14	US-3,879,262	04-22-1975	Schuurs et al.	
	15	US-3,901,654	08-26-1975	Gross	
	16	US-3,935,074	01-27-1976	Rubenstein et al.	
	17	US-3,984,533	05-5-1976	Uzgiris	
	18	US-3,996,345	07-7-1976	Ullman et al.	
	19	US-4,034,074	05-5-1977	Miles	
	20	US-4,098,876	04-4-1978	Piasio et al.	
	21	US-4,879,219	07-7-1989	Wands et al.	
	22	US-5,011,771	04-30-1991	Bellet et al.	
	23	US-5,281,521	01-25-1994	Trojanowski et al.	
	24	US-6,303,567	10-16-2001	Findeis et al.	
	25	US-2004/0052928	03-18-2004	Gazit	
	26	US-2005/0020809	01-27-2005	Gazit	
	27	US-5,688,561	11-18-1997	Ichikawa et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. 1	Foreign Patent Documents	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	28	EP 0264166	04-20-1988	Gordon et al.		
	29	PCT WO 2004/052773	06-24-2004	Reches et al.		
	30	PCT WO 2004/060791	07-22-2004	Gazit et al.		
	31	PCT WO 99/58652	11-18-1999	Gerdes et al.		
	32	PCT WO 01/10457	02-15-2001	Vahlne		
	33	PCT WO 80/00789	01-1-1980	Chu et al.		
	34	PCT WO 03/063760	07-7-2003	Gazit		
	35	PCT WO 2005/000193	06-6-2005	Gazit		
Examiner Signature				Date Considered		

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Filing Date	Herewith
				First Named Inventor	Ehud GAZIT et al
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	2		4	Attorney Docket Number	31689
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	36	Hartgerink et al. "Self-Assembling Peptide Nanotubes", Journal of the American Chemical Society, 118: 43-50, 1996.			
	37	Ajayan et al. "Applications of Carbon Nanotubes", Topics of Applied Physics, 80: 391-425, 2001.			
	38	Booth et al. "Instability, Unfolding and Aggregation of Human Lysozyme Variants Underlying Amyloid Fibrillogenesis", Nature, 385: 787-793, 1997.			
	39	Glenner "Amyloid Deposits and Amyloidosis. The Beta-Fibrilloses (First of Two Parts)", The New England Journal of Medicine, 302(23): 1283-1292, 1980.			
	40	Ferrannini "Insulin Resistance Versus Insulin Deficiency in Non-Insulin-Dependent Diabetes Mellitus: Problems and Prospects", Endocrine Reviews, 19(4): 477-490, 1998.			
	41	Westermarck "Amyloid and Polypeptide Hormones: What is Their Interrelationship?", Amyloid Int. J. Exp. Clin. Invest, 1: 47-60, 1994.			
	42	Westermarck "Islet Amyloid Polypeptide: Pinpointing Amino Acid Residues Linked to Amyloid Fibril Formation", Proc. Natl. Acad. Sci. USA, 87: 5036-5040, 1990.			
	43	Johnson et al. "Islet Amyloid, Islet-Amyloid Polypeptide, and Diabetes Mellitus", The New England Journal of Medicine, 321(8): 513-518, 1989.			
	44	Mossmann et al. "Islet Amyloid Polypeptide: Identification and Chromosomal Localization of the Human Gene", FEBS Letters, 239(2): 227-232, 1988.			
	45	Moriarty et al. "Effects of Sequential Proline Substitutions on Amyloid Formation by Human Amylin-20-29", Biochemistry, 38: 1811-1818, 1999.			
	46	Höppener et al. "Islet Amyloid and Type 2 Diabetes Mellitus", The New England Journal of Medicine, 343(6): 411-419, 2000.			
	47	Seino "S20G Mutation of the Amylin Gene Is Associated With Type II Diabetes in Japanes", Diabetologia, 44: 906-909, 2001.			
	48	Gillmore et al. "Amyloidosis A Review of Recent Diagnostic and Therapeutic Developments", British Journal of Haematology, 99: 245-256, 1997.			
	49	Kulkarni et al. "Investigation of the Effect of Antisense Oligodeoxynucleotides to Islet Amyloid Polypeptide mRNA on Insulin Release, Content and Expression", Journal of Endocrinology, 151: 341-348, 1996.			
	50	Novials et al. "Reduction of Islet Amylin Expression and Basal Secretion by Adenovirus-Mediated Delivery of Amylin Antisense cDNA", Pancreas, 17(2): 182-186, 1998.			
	51	Kahn et al. "Islet Amyloid: A Long-Recognized But Underappreciated Pathological Feature of Type 2 Diabetes", Diabetes, 48: 241-253, 1999.			
	52	Merlini et al. "Interreaction of the Anthracycline 4'-Iodo-4'-Deoxydoxorubicin With Amyloid Fibrils: Inhibition of Amyloidogenesis", Proc. Natl. Acad. Sci. USA, 92: 2959-2963, 1995.			
	53	Soto et al. Beta-Sheet Breaker Peptides Inhibit Fibrillogenesis in A Rat Brain Model of Amyloidosis: Implications for Alzheimer's Therapy", Nature Medicine, 4(7): 822-826, 1998.			
	54	Tenidis et al. "Identification of A Penta- and Hexapeptide of Islet Amyloid Polypeptide (IAPP) With Amyloidogenic and Cytotoxic Properties", Journal of Molecular Biology, 295(4): 1055-1071, 2000.			
	55	Kuner et al. "Controlling Polymerization of Beta-Amyloid and Prion-Derived Peptides With Synthetic Small Molecule Ligands", Journal of Biological Chemistry, 275(3): 1673-1678, 2000.			
	56	Findels "Approaches to Discovery and Characterization of Inhibitors of Amyloid Beta-Peptide Polymerization", Biochimia & Biophysica Acta, 1502: 76-84, 2000.			

57	Wilesmith et al. "Bovine Spongiform Encephalopathy", Current Topics in Microbiology & Immunology, 172: 21-38, 1991.	
58	Gajdusek "Unconventional Viruses and the Origin and Disappearance of Kuru", Science, 197(4307): 943-960, 1977.	
59	Medora et al. "Fatal Familial Insomnia, A Prion Disease With A Mutation at Codon 178 of the Prion Protein Gene", The New England Journal of Medicine, 326(7): 444-449, 1992.	
60	Pinkert et al. "An Albumin Enhancer Located 10 Kb Upstream Functions Along With Its Promoter to Direct Efficient, Liver-Specific Expression in Transgenic Mice", Genes & Development, 1: 268-276, 1987.	
61	Calame et al. "Transcriptional Controlling Elements in the Immunoglobulin and T Cell Receptor Loci", Advances in Immunology, 43: 235-275, 1988.	
62	Winoto et al. "A Novel, Inducible and T Cell-Specific Enhancer Located at the 3' End of the T Cell Receptor Alpha Locus", The EMBO Journal, 8(3): 729-733, 1989.	
63	Banerji et al. "A Lymphocyte-Specific Cellular Enhancer Is Located Downstream of the Joining Region in Immunoglobulin Heavy Chain Genes", Cell, 33: 729-740, 1983.	
64	Byrne et al. "Multiplex Gene Regulation: A Two-Tiered Approach to Transgene Regulation in Transgenic Mice", Proc. Natl. Acad. Sci. USA, 86: 5473-5477, 1989.	
65	Edlund et al. "Cell-Specific Expression of the Rat Insuline Gene: Evidence for Role of Two Distinct 5' Flanking Elements", Science, 230(4278): 912-916, 1985.	
66	Bursavich et al. "Designing Non-Peptide Peptidomimetics in the 21st Century: Inhibitors Targeting Conformational Ensembles", Journal of Medical Chemistry, 45(3): 541-558, 2002.	
67	Baltzer et al. "De Novo Design of Proteins - What Are the Rules?", Chem. Rev., 101(10): 3153-3163, 2001.	
68	Orlandi et al. "Cloning Immunoglobulin Variable Domains for Expression by the Polymerase Chain Reaction", Proc. Natl. Acad. Sci. USA, 86: 3833-3837, 1989.	
69	Winter et al. "Man-Made Antibodies", Nature, 349: 293-299, 1991.	
70	Kohler et al. "Continuous Cultures of Fused Cells Secreting Antibody of Predefined Specificity", Nature, 256: 495-497, 1975.	
71	Kozbor et al. "Specific Immunoglobulin Production and Enhanced Tumorigenicity Following Ascites Growth of Human Hybridomas", Journal of Immunological Methods, 81: 31-42, 1985.	
72	Cote et al. "Generation of Human Monoclonal Antibodies Reactive With Cellular Antigens", Proc. Natl. Acad. Sci. USA, 80: 2026-2030, 1983.	
73	Cole et al. "Human Monoclonal Antibodies", Molecular & Cellular Biochemistry, 62(2): 109-120, 1984.	
74	Han et al. "Technetium Complexes for the Quantitation of Brain Amyloid", J. Am. Chem. Soc., 118: 4506-4507, 1996.	
75	Sambrook et al. "Molecular Cloning: A Laboratory Manual", 2nd Edition, Cold Spring Harbor Laboratory, 1989.	
76	Ausubel et al. Current Protocols in Molecular Biology, 1 (Suppl.63).	
77	Perbal "A Practical Guide to Molecular Cloning", Wiley-Interscience Publication.	
78	Stites et al. Basic & Clinical Immunology, 8th Edition.	
79	Gait "Oligonucleotide Synthesis - A Practical Approach", IRL Press.	
80	Freshney "Animal Cell Culture - A Practical Approach", IRL Press.	
81	Marshak et al. "Strategies for Protein Purification and Characterization, A Laboratory Course Manual", Cold Spring Harbor Laboratory Press, 1996.	
82	Cooper "Selective Amyloid Staining As A Function of Amyloid Composition and Structure. Histochemical Analysis of the Alkaline Congo Red. Standardized Toluidine Blue, and Iodine Methods", Laboratory Investigation, 31(3): 232-238, 1974.	
83	Gorman et al. "Alzheimer β -Amyloid Peptides, Structures Of Amyloid Fibrils and Alternate Aggregation Products", Biopolymers, 60: 381-394, 2001. Claims: 1-16, 22-26, 70-80, 91-100.	
84	Kapurniotu et al. DATABASE, Accession No. AAW93015, 1991. Claims: 1-16, 22-26.	
85	Hoepfener et al. "The Complete Islet Amyloid Polypeptide Precursor Is Encoded by Two Exons", Biochem. Biophys. Res. Commun., 189: 1569-1577, 1993. DATABASE, Accession No. S04016, 1993. Claims: 1-16, 22-26.	
86	Stephenson et al. "The 'Promiscuous Drug Concept' With Applications to Alzheimer's Disease", FEBS Letters, 579: 1338-1342, 2005.	
87	Hayden et al. "'A' Is for Amylin and Amyloid in Type 2 Diabetes Mellitus", JOP. J. Pancreas (Online), 2(4): 124-139, 2001.	

88	Grady et al. "Axe-Txe, A Broad-Spectrum Proteic Toxin-Antitoxin System Specified by A Multidrug-Resistant, Clinical Isolate of Enterococcus Faecium", Molecular Biology, 47(5): 1419-1432, 2003. Abstract, P.1424, Col. 2, Fig. 5.
89	Cherny et al. "The YefM Antitoxin Defines A Family of Natively Unfolded Proteins", The Journal of Biological Chemistry, 279(9): 8252-8261, 2004.
90	Engelberg-Kulka et al. "Bacterial Programmed Cell Death Systems as Targets for Antibiotics", Trends in Microbiology, 12(2): 66-71, 2004.
91	Forloni et al. "Anti-Amyloidogenic Activity of Tetracyclines: Studies In Vitro", FEBS Letters, 487(3): 404-407, 2001. Abstract, Results, Figs. 1, 3.
92	Lansbury Jr. "Following Nature's Anti-Amyloid Strategy", Nature Biotechnology, 19(2): 112-113, 2001.
93	Grateau "Le Curli du Coli: Une Variété Physiologique d'Amylose", Medecine Sciences, 18(6-7): 664, 2002.
94	Cherny et al. "The Formation of Escherichia Coli Curli Amyloid Fibrils Is Mediated by Prion-Like Peptide Repeats", Journal of Molecular Biology, 352(2): 245-252, 2005.
95	Görbitz "Nanotube Formation by Hydrophobic Dipeptides", Chemistry, 7(23): 5153-5159, 2001.
96	Reches et al. "Amyloid Fibril Formation by Pentapeptide and Tetrapeptide Fragments of Human Calcitonin", Journal of Biological Chemistry, 277(38): 35475-35480, 2002.
97	Halder et al. "First Crystallographic Signature of the Highly Ordered Supramolecular Helical Assemblage From A Tripeptide Containing A Non-Coded Amino Acid", Tetrahedron Letters, 43(14): 2653-2656, 2002.
98	Maji et al. "Fibril-Forming Model Synthetic Peptides Containing 3-Aminophenylacetic Acid", Tetrahedron, 58(43): 8695-8702, 2002.
99	Harterink et al. "Peptide Nanotubes and Beyond", Chemistry, A European Journal, 4(8): 1367-1372, 1998.
100	Ghadiri et al. "Self-Assembling Organic Nanotubes Based on A Cyclic Peptide Architecture", Nature, 366: 324-327, 1993.
101	Horne et al. "A Heterocyclic Peptide Nanotube", Journal of the American Chemical Society, 125(31): 9372-9376, 2003.
102	Reches et al. "Casting Metal Nanowires Within Discrete Self-Assembled Peptide Nanotubes", Science, 300(5619): 625-627, 2003.
103	Adekore et al. "Carbon Nanotubes", P.1-11, 2001.
104	Brauer "GB-245 Nanotubes: Directions and Techno", BCC, P.1-14, 2000.
105	Martin et al. "The Emerging Field of Nanotube Biotechnology", Nature Reviews, 2: 29-37, 2003.
106	Zhang et al. "Design of Nanostructured Biological Materials Through Self-Assembly of Peptides and Proteins", Current Opinion in Chemical Biology, 6: 865-871, 2002.
107	Daenen et al. "The Wondrous World of Carbon Nanotubes", P.1-8, 2003.
108	Gazit "Global Analysis of Tandem Aromatic Optapeptide Repeats: The Significance of the Aroma-Glycine Motif", Bioinformatics Discovery Note, 18(6): 880-883, 2002.
109	Gazit "The 'Correctly Folded' State of Proteins: Is it a Metastable State?", Angew. Chem. Int. Ed., 41(2): 257-259, 2002.
110	Gazit "A Possible Role for Phi-Stacking in the Self-Assembly of Amyloid Fibrils", FASEB: 77-83, 2002.
111	Coughlan et al. "Factors Influencing the Processing and Function of the Amyloid Beta Precursor Protein - A Potential Therapeutic Target in Alzheimer's Disease?", Pharmacology and Therapeutics, 86: 111-144, 2000.
112	Damas et al. "Review: TTR Amyloidosis - Structural Features Leading to Protein Aggregation and Their Implications on Therapeutic Strategies", Journal of Structural Biology, 130: 290-299, 2000.
113	Gazit "Mechanistic Studies of the Process of Amyloid Fibrils Formation by the Use of Peptide Fragments and Analogues: Implications of the Design of Fibrillization Inhibitors", Current Medicinal Chemistry, 9: 1667-1675, 2002.
114	Mazor et al. "Identification and Characterization of A Novel Molecular-Recognition and Self-Assembly Domain Within the Islet Amyloid Polypeptide", Journal of Molecular Biology, 322: 1013-1024, 2002.

Signature	/Nina Archie/	Considered	11/20/2008
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